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China, Peoples Republic of

Grain and Feed

The Feed Industry in Guangdong

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Report Highlights:

Guangdong Province is one of the biggest feed producers in China. There are about 260 feed mills in the province, with a total production of 8.51 million metric tons in 2001, about the same as the previous year. The production accounted for 10.6 per cent of China's total. On average, more than 80 per cent of the products are for the province's own use. The output of the province's feed industry is expected to have a slight increase in Year 2002.

Includes PSD changes: No
Includes Trade Matrix: No
Unscheduled Report
Guangzhou [CH3], CH

Guangdong's Feed Production

Guangdong Province is one of the biggest feed producers in China. The Province's output accounted for more than 10 per cent of China's total in each of the past five consecutive years 1997-2001 (Table 1). While the rate of increase for the national production between 1997 and 2001 was 27 per cent, the comparable rate for Guangdong was 20 per cent: Guangdong's feed production had not kept pace with the national growth rate in the last five years.

Table 1
Production of Feed in China and Guangdong, 1997-2001
(million metric tons)

	1997	1998	1999	2000	2001	Per Cent Change
China's National Total	62.99	65.99	68.71	74.29	80.20	27.32
Guangdong	7.11	6.81	7.59	8.51	8.51	19.69
Per Cent of Guangdong Production to National Total	11.29	10.32	11.05	11.46	10.61	

Source: Guangdong Feed Industry Association

Table 2
Value of Guangdong's Feed, 1997-2001

	1997	1998	1999	2000	2001	Per Cent Change
Value in billion RMB yuan	17.14	15.61	14.78	15.25	17.15	0.06
Value in billion USD	2.07	1.89	1.79	1.85	2.08	
Output in million MT	7.11	6.81	7.59	8.51	8.51	19.69
Value per MMT in billion USD	0.29	0.28	0.24	0.22	0.24	
Value per MT in USD	291.67	277.34	235.61	216.82	243.83	

Source: Guangdong Feed Industry Association

The annual per metric ton value of Guangdong's feed in the five-year period 1997-2001 had declined from a high of USD291.67 in 1997 to a low of USD216.82 in 2000. In 2001, the trend was reversed, with the value per MT rose to USD243.83 (Table 2). The five-year value trend was down, down, down, and up from one year to the next. However, the production trend for the same period was down, up, up, and even. The two trends did not match. The falling price of feed is one probable "explanation" for Guangdong's production in the last five years not keeping pace with the national growth rate.

Of the feed produced in Guangdong, the province used 86-90 per cent within the province. Shipment to other provinces had declined from 13 per cent to 10 per cent of the production, and export had declined from 1.6 per cent to 0.4 per cent (Table 3). The lower demands from other provinces and the export market was another probable "explanation" for Guangdong's production not keeping pace with the national growth.

Table 3

Destination of Guangdong's Feed, 1997-2001

Volume in million MT	1997	1998	1999	2000	2001	Per Cent Change
Guangdong	6.10	5.89	6.66	7.55	7.63	25.08
Other Provinces	0.90	0.84	0.86	0.87	0.85	-5.56
Exports	0.11	0.09	0.07	0.08	0.03	-72.73
Total Production	7.11	6.82	7.59	8.50	8.51	19.69
Per Cent						
Guangdong	85.79	86.36	87.75	88.82	89.66	
Other Provinces	12.66	12.32	11.33	10.24	9.99	
Exports	1.55	1.32	0.92	0.94	0.35	
Total	100.00	100.00	100.00	100.00	100.00	

Source: Guangdong Feed Industry Association

Feed Mills in Guangdong

There are about 260 feed mills in the province, with a total output of 8.51 million metric tons in 2001, practically the same amount as in the previous year. The output of the province's feed industry is expected to increase by a very small margin in 2002. Among these mills, 47 have an annual output range of 50,000 to 90,000 MT each and 16 with an annual output of 100,000 MT or more. The mills with share-ownership or private ownership have the advantage of fast decision-making, flexible management, and most importantly, lower operating cost. They are leading the industry and account for 76 per cent of the total number of manufacturers. The joint ventures or the solely foreign owned feed mills account for 12 per cent of the province's total.

The biggest feed manufacturer in Guangdong is the Wen's Food Group located in Xinxing County, Yunfu City, Guangdong. Annually, it produces 500,000 MT of feed in Guangdong and 300,000 MT outside Guangdong. The other top manufacturers in Guangdong are the Guanghong Jiujiang, Guanghong Chia Tai Conti, Shunde Guangshun, Guangdong Hengxing, Guangdong Tongwei, Panyu Nanbao, Shunde Huaxing, Shunde Libao, Xinhui Xinliang, and Guangdong Zhanda Lanke. Each of these produces more than 100,000 MT of feed annually and none of them is a state-owned enterprise.

End Users of Feed

The feed produced in Guangdong meet essentially the needs of four groups of farmers: poultry, swine, aquaculture, and other live animals (Table 4). In the last five years, poultry feed on average accounted for more than two-thirds of the feed supplies. Its increase was from 4.99 million MT in 1997 to 5.56 million MT in 2001, an 11 per cent increase. However, the growth rate was volatile, marked by a down, up, up, down pattern.

On average, the swine industry consumed one-fifth of the feed supplies. Its increase was from 1.56 million MT in 1997 to 1.74 million MT in 2001, also an 11 per cent increase. The growth rate was marked by an up, down, even, up pattern.

Table 4

End Users of Guangdong's Feed, 1997-2001

Volume in million MT	1997	1998	1999	2000	2001	Per Cent Change
Poultry Feed	4.99	4.49	5.32	5.79	5.56	11.42
Swine Feed	1.56	1.72	1.55	1.59	1.74	11.54
Aquaculture Feed	0.43	0.49	0.58	0.82	1.08	151.16
Others	0.12	0.12	0.14	0.31	0.13	8.33
Total	7.10	6.82	7.59	8.51	8.51	
Per Cent						
Poultry Feed	70	66	70	68	65	
Swine Feed	22	25	20	19	20	
Aquaculture Feed	6	7	8	10	13	
Others	2	2	2	4	2	
Total	100.00	100.00	100.00	100.00	100.00	

Source: Guangdong Feed Industry Association

The demands of aquaculture was spectacular, from 0.43 million MT in 1997 to 1.08 million MT in 2001, a 151 per cent increase. The growth pattern was up, up, up, up; from one year to the next. In fact, the aquaculture farmers had moved from using six per cent of the total feed in 1997 to using 13 per cent in 2001.

In the last five years, the hog industry in Guangdong had a 31 per cent increase in the number of animals raised, and the poultry industries had a 35 per cent increase (Table 5). Both these production increases raised the feed demand from 16.37 million MT in 1997 to 21.80 million MT in 2001, a 33 per cent increase (Table 5A). As noted in Table 1 (and Table 5A), feed production in Guangdong in the last five years rose from 7.11 million MT in 1997 to 8.51 million MT in 2001. The production was insufficient for the feed demands of the hog and poultry industries.

Table 5

Hog & Poultry Production in Guangdong, 1997-2001

In Million Heads	1997	1998	1999	2000	2001	Per Cent Increase
Hog	38.63	41.9	49.39	49.9	50.56	30.88
Poultry	911.97	1,017.05	1,224.84	1,248	1234.12	35.30

Guangdong Yearbook & Guangdong Department of Agriculture

Table 5A

Feed Demand and Production in Guangdong, 1997-2001

In Million MT	1997	1998	1999	2000	2001	Per Cent Increase
Hog at 0.3 MT of feed	11.59	12.57	14.82	14.97	15.17	30.88
Poultry at 5.25 kg of feed	4.78	5.34	6.43	6.55	6.48	35.56
Total Feed Demand	16.37	17.95	21.41	21.66	21.80	33.17

Guangdong Feed Production	7.11	6.81	7.59	8.51	8.51	19.69
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Table 6

Aquaculture Production in Guangdong, 1997-2001

Volume in million MT	1997	1998	1999	2000	2001	Per Cent Increase
Seawater Cultured	1.38	1.51	1.61	1.69	1.79	29.71
Freshwater Cultured	1.80	1.96	2.08	2.19	2.29	27.22

Source: Guangdong Statistical Yearbook and China Statistical Yearbook

Between 1997 and 2001, the cultivation of seawater and freshwater fish and other aquatic products had a 30 per cent and 27 per cent increase, respectively (Table 6). The aquatic industry also raised the feed demand.

The Swine Industry

As shown in Table 5, there was a 31 per cent increase in the number of hogs raised in Guangdong in the last five years. Raising pigs for marketing, especially to Hong Kong, was a profitable business in Guangdong until 1998 when hog prices fell sharply. Hog prices dropped as a result of over production and decreased demand for live pigs from Hong Kong. Hong Kong's decrease in demand was a result of the Asian financial crisis from which it has not yet recovered.

By the end of 2001, Guangdong had 1,600 pig farms capable of producing 5,000 heads of pigs each year and 300 production facilities capable of producing 10,000 heads annually. Besides, there are 55,800 rural households engaged in the pig raising business. The mass production facilities account for 60 per cent of the total in 2001; the total production was 30 million heads. The hog industry in Guangdong is expected to grow steadily with a concurrent rising demand of feed.

The Poultry Industry

The poultry raised in Guangdong are broilers (70 per cent) and ducks (20 per cent) essentially. As shown in Table 5, there was a 35 per cent increase in the number of poultry raised in the last five years. When China first opened its door to the world in the late 1970s, poultry meat was in short supply. After a 10-year development, the supply and demand of poultry meat attained equilibrium in early 1990s. However, as the poultry business became more profitable, more people were drawn into the business, resulting in oversupply and falling prices.

In late 1997 and early 1998, Hong Kong had an outbreak of avian influenza (bird flu), millions of chickens were killed and live birds were barred from entering Hong Kong. Widespread rumors had kept consumers from buying chicken products. Demands for live chicken decreased drastically and Guangdong's poultry industry, according to industry sources, lost nearly US100 million dollars. By 1999, some of the small and medium sized poultry farms either declared bankrupt or were elbowed out of the business. The demands for poultry feed also dropped. In 2001, another outbreak of avian influenza in Hong Kong had again impacted the demand for live chicken and the production of poultry feed in Guangdong.

Currently, there are 31,348 Guangdong farms or households that produced over 2,000 broilers a year,

yielding a total of 337 million heads, accounting for 27.3 per cent of the total number of available broilers in the market. According to the Guangdong Agricultural Bureau, the raising of broilers, ducks and geese in 2002 will be close to last year's level. The demand for poultry feed will thus not increase.

The Aquaculture Industry

In recent years, with China's restricting fishing to a limited season in the year but the demand for fresh seafood increasing, cultivating aquatic products became an alternative to traditional fishing.

Cultivated products, barring natural disasters, are capable of mass production and susceptible to quality control. Their supplies are predictable and more replenish-able, in contrast to natural marine products. Cultivating aquatic products created an increased demand for aquatic feed.

Table 7
Aquaculture Production in Guangdong, 1997-2001

Volume in million MT	1997	1998	1999	2000	2001	Per Cent Change
Seawater Catches	1.92	1.96	1.95	1.92	1.88	-2.08
Seawater Cultured	1.38	1.51	1.61	1.69	1.79	29.71
Freshwater Catches	0.10	0.12	0.13	0.14	0.13	30.00
Freshwater Cultured	1.80	1.96	2.08	2.19	2.29	27.22
Total	5.20	5.55	5.77	5.94	6.09	17.12
Per Cent						
Seawater Catches	36.92	35.32	33.80	32.32	30.87	
Seawater Cultured	26.54	27.21	27.90	28.45	29.39	
Freshwater Catches	1.92	2.16	2.25	2.36	2.13	
Freshwater Cultured	34.62	35.32	36.05	36.87	37.60	
Total	100.00	100.00	100.00	100.00	100.00	

Source: Guangdong Statistical Yearbook and China Statistical Yearbook

As shown in Table 7, aquaculture production in the last five years had an increase of 17 per cent, from 5.20 million MT to 6.09 million MT. In each of the last five years, freshwater catches was about two per cent of the total output, seawater catches and freshwater cultured products were more than two-thirds of the total, and seawater cultured products were about one-fourth of the total. While the amount of yield for seawater catches declined from 1.92 million MT in 1997 to 1.88 million MT in 2001, both the seawater cultured products and the freshwater cultured products had steady and yearly increases.

The Guangdong Provincial Ocean and Fishery Bureau predicts a slight increase of aquatic products in 2002. The Guangdong Feed Industry Association has a similar prediction for aquaculture feed. Based on the continuing seasonal embargo on fishing, the stipulation that catch for fresh and seawater products be held to zero per cent growth, the continuing market demand for aquatic products, and the Ocean and Fishery Bureau's prediction, one might expect the real increase of aquaculture production will be in the cultivated segment of the seafood industry. In other words, an increase demand for aquaculture feed. Based on the average of the last five years, the increase would be at least a 5 or 6 per cent.

Feed Ingredients

Industry sources have reported that the principal users of feed, the poultry, swine, and aquaculture businesses, are expected an increase in production and feed demand in 2002 and beyond.

As Guangdong does not grow grains or oilseed in the province, it will have to import these bulk commodities from Northeastern China or abroad. Currently, Guangdong needs about 2 million MT of soybean meals and 5 million MT of corn for feed production each year. Most of the soybean meals come from oil crushing plants importing soybean from abroad. Guangdong also imports soybean meals directly when meals produced in China are more expensive than the imported ones. In 2001, China imported 5.73 million MT of soybean from the United States and Guangdong consumed a vast amount of the resultant soybean meals.

Practically all the corn needed for feed production is from domestic sources. The price of US corn is RMB180-200 yuan (USD21.78-24.20) per MT higher than domestic corn. Unless the feed producers are able to import under the tariff rate quote, they are unlikely to import corn from abroad. The high tariff and the value-added tax made corn import unprofitable.

Other ingredients for Chinese feed production include whey powder, meat and bone meal (MBM), poultry byproduct meal (PBM), methionine, and lysine from abroad; mostly from the United States and Europe. The annual needs are about 250,000 MT of whey powder, 100,000 MT of MBM, and 12,000-24,000 MT of PBM, 50,000 MT of methionine, and 80,000 MT of lysine. (Source: *Feed Landscape*, No. 13, 2002) As feed production increases, the demand for these ingredients will also increase.

Industry sources have repeatedly said that price is the key factor for determining whether they would source the ingredients from abroad, domestically or use substitutes such as peanut meal, rapeseed meal, or cotton meal. US soybean faces stiff competition from Northeastern China, Argentina, and Brazil.

US Cooperators' Contribution

The American Soybean Association, the US Grains Council, and the National Renderers Association are promoting the use of US ingredients in Chinese animal feed. They conduct trials, demonstrations and technical seminars in South China to promote the use of US bulk commodities and additives to raise the quality of Chinese feed. They also work with US and Chinese government agencies to remove trade barriers. As Chinese officials and business people gain more knowledge about US products and Chinese urban residents continue to have more disposable income, we expect China's feed industry in South China will have a higher demand for US bulk commodities.

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